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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,573	12/22/2003	Gerard H. ROUSSEAU	117422	1572

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EXAMINER	
NGUYEN, XUAN LAN T	

ART UNIT	PAPER NUMBER
3683	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/707,573	ROUSSEAU, GERARD H.	
	Examiner	Art Unit	
	Lan Nguyen	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7,8,10-15,17,18 and 20-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7,8,10-15,17,18 and 20-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 July 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 7/15/04. These drawings are approved.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 7, 8 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Giard.

Re: claim 1, Giard shows in figures 13A, B, C, a metering blade suspension system, as in the present invention, comprising: a metering blade assembly, wherein the metering blade assembly comprises a metering blade 5 mounted on a mounting bracket 3; and at least one leaf spring 4a, 4b connected to the metering blade assembly, wherein the at least one leaf spring 4a, 4b is connected to a lateral end portion of the mounting bracket 3. Note that in figure 13C, the elastic deformable element 4 on the bottom is connected to a lateral end of mounting bracket 3.

Re: claim 2, Giard shows the leaf spring 4a, 4b as a support arm for the blade assembly.

Re: claim 3, Giard shows in the Abstract that the leaf spring comprises an electrical conductive material.

Re: claim 5, Giard shows the at least one leaf spring comprises a pair of leaf springs 4a, 4b disposed at opposite end portions, 4a for bottom end portion and 4b for the top end portion, of the mounting bracket 3, as shown in figure 13A.

Re: claim 7, Giard shows in figure 13, the leaf spring controls at least an angle of the metering blade 5.

Re: claim 8, Giard shows the metering blade 5 to be pivoting on the at least one leaf spring.

Re: claims 1 and 21, Giard shows in figures 6A-6E, a metering blade suspension system, as in the present invention, comprising: a metering blade assembly, wherein the metering blade assembly comprises a metering blade 5 mounted on a mounting bracket 3, 9; and at least one leaf spring 4a, 4b connected to the metering blade assembly, wherein the at least one leaf spring 4a, 4b is connected to a lateral end portion of the mounting bracket 3. Note that figures 6A-6E do not illustrate the whole metering blade assembly however, each element 4a or 4b is considered as one leaf spring. There inherently would be one element 4a at each end of the metering blade assembly as shown in figure 13C, the elastic deformable element 4a on the bottom is connected to a lateral end of mounting bracket 3. Figure 6C shows the crimp at the top of band 13, same as 4, for connecting to mounting bracket 3, 9, as shown in figure 6A.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4, 10-15, 17, 18, 20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giard in view of Park.

Re: claim 4, Giard's metering blade assembly, as rejected in claim 1, is silent of the material of the leaf spring. Park teaches that a bracket 18 is made of metal in order to be electrically conductive. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used metal as a material for Giard's leaf spring as taught by Park in order for the leaf spring to be electrically conductive; since metal is an excellent material to be used as a spring and as an electrically conductive material.

Re: claim 10, Giard shows in the Abstract that the metering blade is constructed of an electrically conductive material in order to remove static electricity. Giard does not specifically disclose an electrical connection and a grounding path as claimed. Park teaches in figure 4 an electrical connection and a grounding path for bracket 18 wherein bracket 18 supports metering blade 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an electrical connection and a grounding path for Giard's metering blade assembly as taught by Park

in order to remove the static electricity to avoid having ghost images during the printing process.

Re: claims 11-13 and 22, Giard's metering blade assembly, as rejected above, shows a tab portion of the leaf spring as the top portion of elements 4a, 4b embedded in mounting bracket 3, is not shown in a drum maintenance unit and a removable cassette for an imaging apparatus. Park teaches the drum maintenance unit and a removable cassette for an imaging apparatus wherein a metering blade assembly such as Giard's is used in figure 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used Giard's metering blade assembly in a drum maintenance unit and a removable cassette for an imaging apparatus as taught by Park in order to improve the evenness of the deposition of the ink in a drum maintenance unit and a removable cassette for an imaging apparatus which in turn would produce higher quality printing product.

Re: claims 14-15, 17, 18, 23 and 24, Giard shows a method of supporting a metering blade assembly, as in the present invention, comprising: connecting a pair of leaf springs 4a, 4b at opposite ends, as shown in figure 13A, wherein 4a is connected to the bottom end and 4b is connected the top end, of a metering blade assembly 3, 4, 5 by a tab portion, top portion of each 4a, 4b element wherein the top portion is embedded within mounting bracket 3 as shown in figure 13A, wherein said metering blade 5 is pivoting on said leaf spring while the leaf spring controls an angle of the metering blade 5 as shown in figures 13A, B, C. Giard also shows the leaf spring 4a, 4b at the bottom of figure 13C, connecting to a lateral end of the meter blade assembly. In

figures 6A-6E, Giard shows alternative designs of the metering blade assembly wherein the band 13, same as leaf spring 4, comprises a crimp for connecting to mounting bracket 3, 9. Giard's metering blade assembly is not shown in a drum maintenance unit. Park teaches a drum maintenance unit in figure 4 wherein a metering blade assembly such as Giard's is used. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a method of supporting a metering blade such as Giard's method in a drum maintenance unit as taught by Park in order to improve the evenness of the deposition of the ink in a drum maintenance unit which in turn would produce higher quality printing product.

Re: claim 20, Giard shows in the Abstract that the method for supporting a metering blade comprising providing an electrically conductive material leaf spring in order to remove static electricity. Giard does not specifically disclose an electrical connection and a grounding path as claimed. Park teaches in figure 4 an electrical connection and a grounding path for bracket 18 wherein bracket 18 supports metering blade 20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an electrical connection and a grounding path for Giard's method of supporting a metering blade assembly as taught by Park in order to remove the static electricity to avoid having ghost images during the printing process.

Response to Arguments

6. Applicant's arguments filed 7/15/04 have been fully considered but they are not persuasive. Applicant argues that Giard's elastic deformable elements 4a and 4b are

not leaf springs because they are made of wire. Giard discloses in the Abstract that element 4 are made from a cut out sheet to form a double comb. Hence, each element 4a or 4b is not a single wire but a flat elongated comb tooth shape. As illustrated and disclosed, Giard's each element 4a and 4b meets the conventional description of a leaf spring. Proofs of conventional leaf springs which look like each elastic deformable element 4a, 4b of Giard can be seen USP 5,717,987 wherein elements 138, 150 and 160 in figures 3, 4 and 5 are disclosed as thin metal springs. The Examiner maintains that Giard's elements 4a, 4b are leaf springs. Applicant further argues that the teaching of Park would not remedy the deficiencies of Giard. Park was relied upon to teach the environment of a drum maintenance unit which a metering blade assembly could be utilized in and would have been obvious to one of ordinary skill in the art at the time the invention was made to have used Giard's metering blade assembly in a drum maintenance unit as taught by Park in order to improve the evenness of the deposition of the ink in a drum maintenance unit and a removable cassette for an imaging apparatus which in turn would produce higher quality printing product. The rejections are still deemed proper and are repeated above.

Conclusion

7. USP 6,109,174 is the English equivalent of WO 9736747 A1. USP 6,109,174 was relied upon by Applicant in the Response dated 7/15/04. USP 6,109,174 is also relied upon as an English equivalent for the rejection in this Office Action. Note that the ground of rejection has not been changed.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen
Patent Examiner
Art Unit 3683

Lan Nguyen
9/21/04